

Matters of life and death

F. E. G. Cox

Lives at Risk: Public Health in Nineteenth-Century Egypt. By LaVerne Kuhnke. *University of California Press: 1990. Pp. 233. \$40.*

NINETEENTH-century Egypt was not an idyllic place. Dysentery, cholera and Egyptian chlorosis were endemic in the villages and sewage often contaminated the water supplies of Alexandria and Cairo. Malnutrition was everywhere and epidemics of smallpox and plague had ravaged the whole country by the turn of the century. The medical expertise that did exist was largely based on mediaeval Arab medicine but practised, not by professionals of earlier centuries, but by hakims whose training consisted of copying the standard texts in order to memorize them. It is against this background that LaVerne Kuhnke traces the development of public health care in Egypt, with numerous side glances at the implications for health in the developing countries today.

Changes in Egypt began when Muhammad Ali, who had seized power as governor in 1805, formed a conscript army and, anxious about its health, introduced Western medical institutions and technologies which, Kuhnke argues, were not always appropriate to the needs of the

country. In 1827, Ali established a Western medical school modelled on those in France and staffed largely by Italians. Twelve of the first batch of graduates continued their training in Paris in 1832 and five returned to form the nucleus of the school. Their successors made significant contributions to medicine, the most notable being Griesenger, who found that Egyptian chlorosis was caused by hookworms, and Theodor Bilharz, who discovered *Schistosoma haematobium*, the causative agent of the disease that now bears his name, bilharzia. In 1832, a medical school for the training of hakimas (women licensed to practice medicine) was founded, a remarkable achievement in a Muslim society. By 1840, responsibility for health care had also passed to headmasters in schools, with severe penalties for negligence. Thus, by the middle of the century, the elements of public health care had been well established and epidemics were no longer allowed to run unabated.

Epidemics of cholera in 1831 and plague in 1834–36 were countered by rigorous

quarantine regimes. An international quarantine board had been set up some years earlier on advice given by the French council of health, but the 1831 cholera epidemic caught it unprepared. By 1848, as a result of a combination of quarantine measures and the implementation of British sanitary reforms, the next epidemic, although severe, was more easily contained. Plague also ceased to be a serious problem and after 1844 it disappeared from Egypt for 55 years. Vaccination against smallpox was both efficient and effective and between 1837 and 1840, 61,000 children had been vaccinated in Cairo alone although there was strong opposition and non-compliance in many villages.

The evidence presented seems to suggest that the control schemes used actually worked, but Kuhnke questions whether the Western ideas on which they were based were appropriate for Egypt. This is the weakest part of the book and detracts from an otherwise scholarly and dispassionate work. The author perceives an apparent distinction between "authentic medicine", equated with curative medicine, and community and public health concerns, concluding with these words: "As long as the West upholds urban hospital-based curative medicine for the individual as the ideal for 'health care', the lives of rural Egyptians and many others may continue at risk." This is an entirely false picture of how biomedical science interacts with the needs of the developing countries (see, for example, *Biomedical Science and the Third World*, edited by Barry Bloom and Tony Cerami, *Annals of the New York Academy of Sciences*, Vol. 569, 1989). Tropical medicine, and the World Health Organization in particular, is as much concerned with prevention as with cure and the two run together. It is a pity that Kuhnke did not consider bilharzia, as this is a disease that has always been associated with Egypt and from which much can be learned. The conflict for public health strategy is between the needs of water for irrigation and the consequent inevitable spread of the snail vectors. Control of bilharzia is based both on snail control and on chemotherapy, which is essential to reduce contamination of snail-infested waters.

History does repeat itself, and the resistance of some villagers to vaccination and their failure to return for booster doses is still a problem today. It is also interesting that seven of the first twelve graduates of the medical school chose to remain in Paris, and the pile of examination scripts now on my desk reminds me that twentieth-century students also learn large parts of textbooks by heart. □

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